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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,385	12/20/2001	Yuuki Morita	392.1736	5333

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EXAMINER	
RO, BENTSU	
ART UNIT	**PAPER NUMBER**
2837	

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/022,385	MORITA ET AL.	
	Examiner	Art Unit	
	Bentsu Ro	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 August 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

SECOND OFFICE ACTION --- A FINAL REJECTION

1. Claims 7-12 and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by **Hennick US Patent No. 4,341,995.** (This is a new reference.)

Claim 7 read onto Hennick's teaching as follows:

The claim 7:	**Hennick's Fig. 1 teaching:**
7. (Amended). A motor controller	Hennick Fig. 1 teaches a motor velocity profile analyzer, the analyzer at least includes (1) start/stop control of the motor 2 by a signal processor 6; and (2) speed change of the motor 2; thus, the start/stop operation of the motor 2 by the signal processor 6 is a motor controller;
for performing control of position or velocity of a movable member mechanically connected with a motor	Hennick teaches a velocity control, wherein the mechanical drive 3 is a movable member;
using analog feedback signals from encoders for detecting rotational position or velocity of the motor, or position or velocity of the movable member,	the encoder 4 outputs a signal 5, which signal 5 can be either an analog speed feedback signal or a digital speed feedback signal because the encoder can be an analog type or a digital type, see column 2, lines 67-68; again, Hennick's system is to determine the velocity of the motor 2 or velocity of the mechanical drive 3;
wherein said motor controller includes means for automatically A/D converting,	if the encoder 4 is an analog type, then an A/D converter is needed (not shown); column 3, lines 63-64 describe the range of A/D converter and the conversion time;

determining and displaying the results of comparison of amplitude and/or offsets of the analog feedback signals	the signal processor 6, the counters 10 and 15 all together are used for "determining"; the digital subtractor 12 is used for "comparison"; the digital display 17 is used for "displaying" the comparison result of a velocity amplitude from the analog feedback signal of the encoder 4;
with respective predetermined values	the output 14 of the oscillator 13 is a respective predetermined value;
on a digital display section of the motor controller or a host controller connected with the motor controller.	the digital display 17 is a "digital display section".

Regarding claims 8 and 9, albeit not shown, the most commonly used display is a seven-segment LED display device. For example, the digital clock uses a seven-segment LED display device.

Regarding claim 10, Hennick's digital display 17 is connected to the motor controller 6.

Regarding claim 11, the A/D conversion value is discussed in claim 7, no further discussion is needed.

Regarding claim 12, the two different phases reads onto one phase from the linear encoder 4 and the other phase from the oscillator 13.

Claim 14 is basically same as that of claim 7, no further discussion is needed.

2. Claims 1-6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hennick.

Claims 1-6 and 13 are basically similar to that of claims 7-12 and 14, respectively except that independent claims 7 and 14 recite a comparison of encoder signal with a reference signal whereas independent claims 1 and 13 does not include such a comparison. All other elements are same in these two groups of claims.

Because no such comparison, the independent claims 1 and 13 are claiming an absolute value of the encoder.

With respect to claims 1 and 13, one can adjust the oscillator 13 to have zero frequency. In such occasion, the display device will display an absolute value of the encoder.

3. Claims 1-5, 7-11, 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Griffin US Patent No. 3,800,898** in view of **Schwinn Product, a bicycle computer** and **Erisman US Patent No. 3,898,563**. (All three are new references.)

Recently the examiner has installed a Schwinn's bicycle computer onto his bicycle. The bicycle computer is a computing device with a digital display. The bicycle computer computes 12 functions including bicycle's speed. The dimension of the bicycle computer is very small, about 1-1/2" x 1-1/2" x ½".

Claim 1 read onto the Griffin's bicycle having a bicycle computer installed therein. The following chart compares the claimed subject matter with a bicycle computer installed in the Griffin's bicycle.

The claim 1:	**Griffin's bicycle with Schwinn's bicycle computer:**
Claim 1. (Currently amended) A motor controller	Griffin's Fig. 1 shows a motor 60 having a control switch 90, thus, the control switch 90 is a motor controller;
for performing control of position or velocity	the switch 90 performs a velocity control;
of a movable member mechanically connected with a motor	the front wheel 14 is a movable member mechanically connected to the motor 60;
using analog feedback signals for encoders	Schwinn Fig. 3 shows a magnet and a sensor Erisman Fig. 4 shows an encoder including magnet 36 and sensor 42; Fig. 5 shows magnet 43 and sensor coil 44; according to Erisman's teaching the sensor coil 44 outputs an analog feedback signal;

for detecting rotational position or velocity of the motor, or position or velocity of the movable member,	the sensor signal is a speed signal of the wheel 14 (Griffin) or 16 (Erisman);
wherein said motor controller includes means for automatically A/D converting, determining and displaying information on at least one of amplitudes, offsets and a phase difference of the analog feedback signals on a digital display section of the motor controller or a hose controller connected with the motor controller.	as mentioned previously, the motor controller reads onto the switch 90; the motor controller should also include the Schwinn's bicycle computer; the bicycle rider controls the switch 90 based on the feedback signal from the bicycle computer; the Schwinn's bicycle computer includes means for automatically A/D converting, determining and displaying information of the bicycle speed.

Claim 13 is similar to that of claim 1, explanation is omitted

With respect to independent claims 7 and 14, the predetermined value can be read as a zero value. All other elements are similar to that of claim 1.

The rejection of claims 2-5 and 8-11 is similar to that explained in paragraph 1 above.

4. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CAR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CAR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication should be directed to Bentsu Ro at telephone number 703 308-3656.

September 17, 2003

Bentsu Ro
Primary Examiner